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EXAMINER

CHAWAN, VIJAY B

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/656,225	Applicant(s) KIVIMAKI, MIKA	
	Examiner Vijay B. Chawan	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 30-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28, 30-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13, 16-28, 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurzweil et al., (5,875,428) and in view of Kurzweil et al., (6,052,663).

As per claim 1, Kurzweil et al., ('428) teach an electronic device comprising:

a user interface including a display for displaying text (Col.3, line 25, Fig.2, item 39) and,

speech synthesizer means including a loudspeaker, which converts an input dependent upon a text, to an audio output representative of a person reading the text (Fig.3, item 52, Col.2, line 46, Fig.1, item 22, Col.4, lines 16-21); and,

control means (Col.1, lines 43-62, i.e., the computer program controls the execution), for controlling the display (Col.3, lines 25-27) and for providing an input to the speech synthesizer means (Col.4 lines 6-7, 18-21), which controls the display of a text (Col.3, lines 25-27), to provide an input corresponding to the displayed text to the speech synthesizer (Col.4, lines 6-7, 18-21), and to highlight a portion or portions of the

displayed text (Col.4, lines 5-6, 20-23, Col.5, lines 52-55), wherein initiation of the highlighting of a text portion is delayed by the control means with respect to the audio output corresponding to the text portion (Col.5, lines 54-55, 66-67, Col.6, lines 1-6, the word is not highlighted until the word is read aloud to the user, which incorporates an inherent delay).

Kurzweil et al., ('428) do not specifically teach initiating highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion. Kurzweil et al., ('663) do teach initiating interrupt driven highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion (Col.6, lines 20-51). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention, because an artisan would readily recognize this would be an efficient use of text display using double highlighting where the highlighting would be of a current word.

As per claim 2, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein the control means synchronizes the highlighting with the conversion of text to audio output (Col.5, lines 52-55).

As per claim 3, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein the control means varies the highlighting with the conversion of text to audio output (Col.5, lines 60-63, color is varied).

As per claim 4, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein the control means extends the highlighting through the displayed text with the

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conversion of text to audio output (Col.5, lines 66-67, Col.6, lines 1-13, the highlighting is not only a word, but also a sentence or a paragraph).

As per claim 5, Kurzweil et al., ('428) discloses the device as claimed in claim 4. However, Kurzweil et al., ('428) do not specifically teach wherein extending of highlighting through a text portion lags the conversion of the text portion to audio output by the delay. The aforementioned feature is obvious to an artisan with ordinary skill in art because, by lagging the highlighting through a text portion, more emphasis may be placed on the highlighted text, since the user will first hear the audio portion, and then be able to view the audio signal immediately after. Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the electronic device of claim 4, wherein the extending of highlighting through a text portion lags the conversion of the text portion to audio output by the delay, because, this would enable a user to emphasize by repetition.

As per claim 6, Kurzweil et al., ('428) teach the device of claim 4. However, Kurzweil et al., ('428) do not specifically teach a device as claimed in claim 4, wherein the control means unselectively extends the highlighting through all the text. Highlighting all of the text enables the device to emphasize all the contents of the display rather than a single portion, which can be highly desirable in some instances, for example, if the user is visually impaired. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 4, wherein the control means unselectively extends the highlighting through all of the text for the purpose of emphasizing the entire text.

As per claim 7, Kurzweil et al., ('428) teach the electronic device as claimed in claim 4. However, Kurzweil et al., ('428) do not specifically teach the device of claim 4, wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of the page. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 4, wherein the highlighting extends discontinuously by portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.

As per claim 8, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein the control means highlights a text portion for a limited duration (Col.5, lines 66-67, Col.6, lines 1-13, the highlighting process remains in a given state until an event occurs).

As per claim 9, Kurzweil et al., ('428) teach a device as per claim 8. However, Kurzweil et al., ('428) do not specifically teach the device of claim 8, wherein the highlighting isolates a portion or portions of text from a body of text, the initiation of the isolation of text lagging the conversion of the text to audio output by the delay and the isolation maintained for the limited duration. Highlighting a portion or portions of text from a body of text allows the device to only place emphasis on certain portions of text. Highlighting only a portion or portions of text after the conversion of text to audio provides the user with greater emphasis on the highlighted text, since the information is

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fed twice to the user, i.e., once audibly, and then visually. Furthermore, highlighting only a portion or portions of text for a limited duration allows the user to continue reading the rest of the text. An artisan would readily recognize that by performing these features physically, in the "real world," so it is apparent that these features can also be performed virtually on an electronic display. Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 8, wherein the highlighting isolates a portion or portions of text from a body of text, the initiation of the isolation of text lagging the conversion of the text to audio output by the delay and the isolation being maintained for the limited duration for the purpose of placing emphasis on only certain portions of the text for a certain amount of time.

As per claim 10, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein the dimension of the highlighted portion is variable (Col.6, lines 8-10, a unit can be a word, line or a sentence).

As per claim 11, Kurzweil et al., ('428) teach a device as claimed in claim 1. However, Kurzweil et al., ('428) do not specifically teach the device of claim 1, wherein the dimension of the highlighted portion is a constant number of words long. An artisan with ordinary skill in the art would readily recognize that highlighting only a set number of words each time provides predictability and consistency in the manner of highlighting, so that the user can comprehend the text in segments rather than in its entirety. Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 1, wherein the dimension of the highlighted

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portion is a constant number of words long, for the purpose of predictability and consistency in the manner of highlighting.

As per claim 12, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein the display displays the full sentence of text being converted (Col.6, lines 10-13, the highlighting process checks whether a unit of text has been completed rather than only displaying a partial unit, which may be a sentence).

As per claim 13, Kurzweil et al., ('428) teach a device as claimed in claim 1. However, Kurzweil et al., ('428) do not specifically teach the device of claim 1, wherein the display displays the previous predetermined plurality of words that have been converted. An artisan with ordinary skill in the art at the time of invention would readily recognize that displaying the previous predetermined plurality of words that have been converted would allow the user or the reader to go back to a previous section for reference in the event that the user did not fully comprehend the previous section, and would like to reread the section. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the device of claim 1, wherein the display displays the previous predetermined plurality of words that have been converted for the purpose of providing a reference to the user.

As per claim 16, Kurzweil et al., ('428) teach the device of claim 1. However, Kurzweil et al., ('428) do not specifically teach the device of claim 1, wherein the control means is arranged to identify proper nouns in the text, and highlight them. An artisan with ordinary skill in the art would readily recognize that identifying proper nouns in the text and highlighting them allows the reader to quickly spot information that may be

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suited for a particular purpose, such as people's names, or places. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention, to modify the device of claim 1 wherein the control means is arranged to identify proper nouns in the text, and highlight them for the purpose of allowing quick recognition of information that may be deemed to be important.

As per claim 17, Kurzweil et al., ('428) teach the device of claim 16. However, Kurzweil et al., ('428) do not specifically teach the device of claim 16, wherein the control means provides different highlighting for the proper nouns in the text. It would have been obvious to one with ordinary skill in the art at the time of invention that, providing different highlighting for the proper nouns in the text allows the reader to quickly spot information that may be suited for a particular purpose, such as people's names, or places. Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 1, wherein the control means provides different highlighting for the proper nouns in the text for the purpose of allowing quick recognition of information that may be deemed to be important.

As per claim 18, Kurzweil et al., ('428) teach the device as claimed in claim 1. However, Kurzweil et al., ('428) do not specifically teach the device as claimed in claim 1, wherein the speech synthesizer means provides signals to the control means to effect the highlighting of specific words. An artisan with ordinary skill in art at the time of invention would recognize that the speech synthesizer can detect what type of words are important, and subsequently signal that those words should be highlighted. Therefore, it would have been obvious to one with ordinary skill in the art at the time of

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invention was made to modify the device of claim 1, wherein the speech synthesizer means provides signals to the control means to effect the highlighting of specific words for the purpose of emphasizing words that the user may find important.

As per claim 19, Kurzweil et al., ('428) teach the device of claim 1. However, Kurzweil et al., ('428) do not specifically teach the device of claim 1, wherein the delay corresponds to a number of converted words or syllables. An artisan with ordinary skill in the art at the time of invention would recognize that since the medium at hand in a display for text, and units that make up the text are words, a delay that corresponds to a number of converted words or syllables is appropriate. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention, to modify the device as claimed in claim 1, wherein the delay corresponds to a number of converted words or syllables for the purpose of highlighting the appropriate unit in a text document suitable to the rate at which a user can comprehend the emphasis.

As per claims 20 and 21, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein highlighting may comprise any one of: contrast variation of the text and/or display background (Col.6, lines 59-63); color variation of the text and/or display background (Col.6, lines 59-63); reformatting of the text including underscoring, bold font, italic font, capitalization, changing font size or type; and, enclosing text in geometric shapes (Col.6, lines 59-63).

As per claim 22, Kurzweil et al., ('428) teach the device as claimed in claim 1. However, Kurzweil et al., ('428) do not specifically teach the device of claim 1, wherein the delay corresponds to a fixed time. An artisan with ordinary skill in the art at the time

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of invention would readily recognize that delaying the highlighting by a fixed time allows the highlighting to be systematic in the amount of emphasis placed on the text.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 1, wherein the delay corresponds to a fixed time for the purpose of providing a consistent methodology to placing emphasis on the text.

As per claim 23, Kurzweil et al., ('428) teach the device of claim 1. However, Kurzweil et al., ('428) do not specifically teach the device of claim 1, wherein the delay is greater than 0.1 seconds. An artisan with ordinary skill in the art at the time of invention would recognize that delaying the highlighting by more than 0.1 seconds allows a quick emphasis to be placed on the visual text. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 1, wherein the delay is greater than 0.1 seconds for the purpose of immediately placing visual emphasis on the text that was audible to the user.

As per claim 24, Kurzweil et al teach the device as claimed in claim 1. However, Kurzweil et al., ('428) do not specifically teach the device of claim 1, wherein the delay is less than 3 seconds. An artisan with ordinary skill in the art at the time of invention that delaying the highlighting by less than 3 seconds allows emphasis to be placed on the visual text at a moderate pace. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the device of claim 1, wherein the delay is less than 3 seconds for the purpose of placing visual emphasis on the text that was heard by the user in a steady fashion.

As per claim 25, Kurzweil et al., ('428) teach a device as claimed in claim 1, wherein the electronic device is a document reader or a hand-held communications device (abstract, a computer and storage device may be a document reader or a hand held communications device).

As per claim 26, Kurzweil et al., ('428) teach a hand-held radio communications device comprising:

a user interface including a display for displaying text (Col.3, line 25, Fig.2, item 39); and,

speech synthesizer means including a loudspeaker, which converts an input dependent upon a text, to an audio output representative of a person reading the text (Fig.3, item 52, Col.2, line 46, Fig.1, item 22, Col.4, lines 16-21); and,

control means (Col.1, lines 43-62, i.e., the computer program controls the execution), for controlling the display (Col.3, lines 25-27) and for providing an input to the speech synthesizer means (Col.4 lines 6-7, 18-21), which controls the display of a text (Col.3, lines 25-27), to provide an input corresponding to the displayed text to the speech synthesizer (Col.4, lines 6-7, 18-21), and to highlight a portion or portions of the displayed text (Col.4, lines 5-6, 20-23, Col.5, lines 52-55), wherein initiation of the highlighting of a text portion is delayed by the control means with respect to the audio output corresponding to the text portion (Col.5, lines 54-55, 66-67, Col.6, lines 1-6, the word is not highlighted until the word is read aloud to the user, which incorporates an inherent delay).

Kurzweil et al., ('428) do not specifically teach initiating highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion. Kurzweil et al., ('663) do teach initiating interrupt driven highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion (Col.6, lines 20-51). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention, because an artisan would readily recognize this would be an efficient use of text display using double highlighting where the highlighting would be of a current word.

As per claim 27, Kurzweil et al., ('428) teach a document reader comprising a user interface including:

- a display for displaying text (Col.3, line 25, Fig.2, item 39); and,
- speech synthesizer means including a loudspeaker, which converts an input dependent upon a text, to an audio output representative of a person reading the text (Fig.3, item 52, Col.2, line 46, Fig.1, item 22, Col.4, lines 16-21); and,
- control means (Col.1, lines 43-62, i.e., the computer program controls the execution), for controlling the display (Col.3, lines 25-27) and for providing an input to the speech synthesizer means (Col.4 lines 6-7, 18-21), which controls the display of a text (Col.3, lines 25-27), to provide an input corresponding to the displayed text to the speech synthesizer (Col.4, lines 6-7, 18-21), and to highlight a portion or portions of the displayed text (Col.4, lines 5-6, 20-23, Col.5, lines 52-55), wherein initiation of the highlighting of a text portion is delayed by the control means with respect to the audio output corresponding to the text portion (Col.5, lines 54-55, 66-67, Col.6, lines 1-6, the

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word is not highlighted until the word is read aloud to the user, which incorporates an inherent delay).

Kurzweil et al., ('428) do not specifically teach initiating highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion. Kurzweil et al., ('663) do teach initiating interrupt driven highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion (Col.6, lines 20-51). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention, because an artisan would readily recognize this would be an efficient use of text display using double highlighting where the highlighting would be of a current word.

As per claim 28, Kurzweil et al., ('428) teach
a display for displaying text (Col.3, line 25, Fig.2, item 39); and,
speech synthesizer means including a loudspeaker, which converts an input dependent upon a text, to an audio output representative of a person reading the text (Fig.3, item 52, Col.2, line 46, Fig.1, item 22, Col.4, lines 16-21); and,

control means (Col.1, lines 43-62, i.e., the computer program controls the execution), for controlling the display (Col.3, lines 25-27) and for providing an input to the speech synthesizer means (Col.4 lines 6-7, 18-21), arranged to control the display of a text (Col.3, lines 25-27), to provide an input corresponding to the displayed text to the speech synthesizer (Col.4, lines 6-7, 18-21), and to highlight a portion or portions of the displayed text (Col.4, lines 5-6, 20-23, Col.5, lines 52-55), wherein initiation of the highlighting of a text portion is delayed with respect to the audio output corresponding to

the text portion (Col.5, lines 54-55, 66-67, Col.6, lines 1-6, the word is not highlighted until the word is read aloud to the user, which incorporates an inherent delay).

Kurzweil et al., ('428) while teaching the user interface which includes the features mentioned above, do not specifically teach a car comprising a hand-held radio communications device which comprises a user interface which includes the features mentioned above. An artisan with ordinary skill in the art would recognize that for a hand-held radio communications device with a user interface to be mounted anywhere in the car or an automobile so that the user can both quickly read emphasized text while his or her attention can not be fully devoted to reading the text. Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of Kurzweil et al., ('428) wherein it is used in a car comprising a hand-held radio communications device which comprises a user interface for the purpose of allowing a busy driver to be able to quickly scan both audio and visual information.

Kurzweil et al., ('428) do not specifically teach initiating highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion. Kurzweil et al., ('663) do teach initiating interrupt driven highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion (Col.6, lines 20-51). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention, because an artisan would readily recognize this would be an efficient use of text display using double highlighting where the highlighting would be of a current word.

As per claim 30, Kurzweil et al., ('428) teach a method for displaying text and providing speech synthesis of the text comprising the steps of:

displaying the text (Col.3, line 25, Fig.2, item 39);

converting a text portion to audio output (Fig.3, item 52, Col.2, line 46, Fig.1, item 22, Col.4, lines 16-21);

determining that the text portion should be highlighted (Col.4, lines 5-6, 20-23, Col.5, lines 52-55);

delaying, and then highlighting the text portion (Col.5, lines 54-55, 66-67, Col.6, lines 1-6, the word is not highlighted until the word is read aloud to the user, which incorporates an inherent delay).

As per claim 31, Kurzweil et al., ('428) teach an electronic device comprising:

a user interface including a display for displaying text (Col.3, line 25, Fig.2, item 39); and,

speech synthesizer means including a loudspeaker, which converts an input dependent upon a text, to an audio output representative of a person reading the text (Fig.3, item 52, Col.2, line 46, Fig.1, item 22, Col.4, lines 16-21); and,

control means (Col.1, lines 43-62, i.e., the computer program controls the execution), for controlling the display (Col.3, lines 25-27) and for providing an input to the speech synthesizer means (Col.4 lines 6-7, 18-21), which controls the display of a text (Col.3, lines 25-27), to provide an input corresponding to the displayed text to the speech synthesizer means (Col.4, lines 6-7, 18-21), and to delay the initiation of the display of a text portion respect to the audio output corresponding to the text (Col.4,

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lines 5-6, 20-23, Col.5, lines 52-55, Col.5, lines 54-55, 66-67, Col.6, lines 1-6, the word is not highlighted until the word is read aloud to the user, which incorporates an inherent delay).

As per claim 32, Kurzweil et al., ('428) teach a method for displaying text and providing speech synthesis of the text comprising the steps of:

converting a text portion to audio output; delaying; and then displaying the text (Col.3, line 25, Fig.2, item 39, Fig.3, item 52, Col.2, line 46, Fig.1, item 22, Col.4, lines 16-21, Col.3, lines 25-27).

Kurzweil et al., ('428) do not specifically teach initiating highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion. Kurzweil et al., ('663) do teach initiating interrupt driven highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion (Col.6, lines 20-51).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention, because an artisan would readily recognize this would be an efficient use of text display using double highlighting where the highlighting would be of a current word.

As per claim 33, Kurzweil et al., ('428) teach the device of claim 31. However, Kurzweil et al., ('428) do not specifically teach the device of claim 31, wherein the delay is greater than 0.1 seconds. An artisan with ordinary skill in the art at the time of invention would recognize that delaying the highlighting by more than 0.1 seconds allows a quick emphasis to be placed on the visual text. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device

of claim 31, wherein the delay is greater than 0.1 seconds for the purpose of immediately placing visual emphasis on the text that was audible to the user.

As per claim 34, Kurzweil et al., ('428) teach the method of claim 32. However, Kurzweil et al., ('428) do not specifically teach the method of claim 32, wherein the delay is greater than 0.1 seconds. An artisan with ordinary skill in the art at the time of invention would recognize that delaying the highlighting by more than 0.1 seconds allows a quick emphasis to be placed on the visual text. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the method of claim 32, wherein the delay is greater than 0.1 seconds for the purpose of immediately placing visual emphasis on the text that was audible to the user in a steady fashion, which is highly desirable.

As per claim 35, Kurzweil et al., ('428) teach the device as claimed in claim 2, wherein the control means varies the highlighting with the conversion of text to audio output (Col.5, lines 60-63, the color is varied).

As per claim 36, Kurzweil et al., ('428) discloses the device as claimed in claim 5. However, Kurzweil et al., ('428) do not specifically teach wherein extending of highlighting through a text portion lags the conversion of the text portion to audio output by the delay. The aforementioned feature is obvious to an artisan with ordinary skill in art because, by lagging the highlighting through a text portion, more emphasis may be placed on the highlighted text, since the user will first hear the audio portion, and then be able to view the audio signal immediately after. Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the

electronic device of claim 5, wherein the extending of highlighting through a text portion lags the conversion of the text portion to audio output by the delay, because, this would enable a user to emphasize by repetition.

As per claim 37, Kurzweil et al., ('428) teach the electronic device as claimed in claim 5. However, Kurzweil et al., ('428) do not specifically teach the device of claim 5, wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of the page. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 5, wherein the highlighting extends discontinuously by portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.

As per claim 38, Kurzweil et al., ('428) teach the electronic device as claimed in claim 6. However, Kurzweil et al., ('428) do not specifically teach the device of claim 6, wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of the page. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 6, wherein the highlighting extends discontinuously by

portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.

As per claim 39, Kurzweil et al., ('428) teach the electronic device as claimed in claim 36. However, Kurzweil et al., ('428) do not specifically teach the device of claim 36, wherein the highlighting extends discontinuously by portions of text corresponding to a word or words. Highlighting the text discontinuously allows emphasis to be placed on select words to facilitate comprehension of only the important sections of the text at hand, just as any student would only highlight specific sections of the page. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 36, wherein the highlighting extends discontinuously by portions of text corresponding to a word or words for the purpose of facilitating comprehension of select text.

As per claim 40, Kurzweil et al., ('428) teach a computer program executable in a processor of an electronic device having a display and speech synthesizer means including a loudspeaker, the computer program comprising a computer program code configuring the processor to provide control means, for controlling the display and for providing an input to the speech synthesizer means, which controls the display of a text, to provide an input corresponding to the displayed text to the speech synthesizer, and to highlight a portion r portions of the displayed text, wherein initiation of the highlighting of a text portion is delayed by the control means with respect to the audio output corresponding to the text portion (Col.1, lines 43-62, i.e., the computer program controls the execution, Col.3, Col.3, line 25, Fig.2, item 39, Fig.3, item 52, Col.2, line 46, Fig.1,

item 22, Col.4, lines 16-21, Col.3, lines 25-27, Col.4, lines 5-6, 20-23, Col.5, lines 52-55, Col.5, lines 54-55, 66-67, Col.6, lines 1-6, the word is not highlighted until the word is read aloud to the user, which incorporates an inherent delay).

Kurzweil et al., ('428) do not specifically teach initiating highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion. Kurzweil et al., ('663) do teach initiating interrupt driven highlighting of a text portion that is delayed by the control means until after the beginning of the audio output corresponding to the text portion (Col.6, lines 20-51). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention, because an artisan would readily recognize this would be an efficient use of text display using double highlighting where the highlighting would be of a current word.

3. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurzweil et al., (5,875,428) and in view of Kurzweil et al., (6,052,663) and further in view of Knowles et al., (5,065,345).

As per claim 14, Kurzweil et al., ('428) in view of Kurzweil et al., ('663) teach the device of claim 1. However, Kurzweil et al., do not specifically teach the device of claim 1, further comprising a dictionary, wherein the control means highlights words not in the dictionary. Knowles et al., do teach highlighting words that are not present in the dictionary when displayed on a screen (Col.15, lines 32-39). Similarly, the words that are not in the dictionary can be highlighted instead of the words that are in the dictionary. Therefore, it would have been obvious to one of ordinary skill in the art at the

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time of invention to modify the device of claim 1, to include a dictionary, wherein the control means highlights words not in the dictionary for the purpose of allowing a user to learn new material, in an educational environment, for example, as taught by Knowles et al., (Col.15, line 39 – the lesson).

As per claim 15, Kurzweil et al., ('428) in view Of Kurzweil et al., ('663) as modified by Knowles et al., teach the device of claim 14. However, Kurzweil et al., in view of Knowles et al., do not specifically teach the device of claim 14, wherein the control means provides different highlighting for the words not in the dictionary. An artisan with ordinary skill in the art at the time of invention would recognize that providing highlighting for words not in the dictionary allows the user to quickly recognize the words that are not in the dictionary and allows the user to learn new material. Therefore it would have been obvious to one with ordinary skill in the art at the time of invention to modify the device of claim 14, wherein the control means provides different highlighting for the words not in the dictionary for the teaching purposes, as taught by Knowles et al., (Col.15, line 39 - the lesson).

Response to Arguments

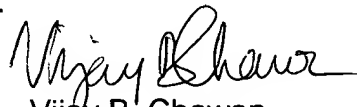
4. Applicant's arguments with respect to claims 1-28, and 30-40, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Vijay B. Chawan
Primary Examiner
Art Unit 2654

vbc
4/13/06

**VIJAY CHAWAN
PRIMARY EXAMINER**